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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,127	06/25/2004	Gang-Hoon Lee	HI-0204	7386

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EXAMINER	
REESE, DAVID C	
ART UNIT	PAPER NUMBER
3677	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,127	LEE ET AL.	
	Examiner	Art Unit	
	David C. Reese	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-12,14-17 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-12, 14-17, and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.1 14, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2007 has been entered. Consequently, the following is the current listing of claims in the instant application:

Status of Claims

- Claims 3, 13, 18, and 20 are canceled.
- Claims 1, 10, and 15 were amended.
- Claims 1-2, 4-12, 14-17, and 19 are pending.
-

Claim Rejections - 35 USC § 103

[1] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

[2] Claims 1, 2, 4-6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri, US-5,598,607, in view of Peterson, US-4,437,784.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such

that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

With respect to claim 1, Katagiri teaches of a pivotal plate (42), a fixing plate (11), and a rotational shaft (14) inserted to vertical planes of the pivotal plate and fixing plate. A frictional member (15) is mounted around the periphery of the shaft (14), both ends of which have a tightening plane on which an inserting hole is formed (43, 44). A tightening member (20) is inserted into the hole, thereby generating a braking force.

The difference between the claim and Katagiri is that Katagiri does not expressly disclose of a plate shaped spacer between the tightening planes so as to provide a predetermined gap between the tightening plates. Peterson teaches an arrangement comprising having parallel tightening planes (28, 30), a tightening member (22a) and a plate shaped spacer (12a) inserted between the tightening planes (28, 30) so as to provide a predetermined gap between the tightening planes (28, 30). Peterson uses the spacer (12a) to help accurately control the distance between a support structure and a workpiece to be fastened to the support structure (see claim 1). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri as taught by Peterson, such that Katagiri includes a spacer plate, so as to help control the distance between the tightening members for force distributing purposes by providing a predetermined gap between said tightening plates. Further, it would have obvious to one having ordinary skill in the art to utilizes the spacer as taught by Peterson into the tightening planes as taught by Katagiri since the operation of the spacer is in no way dependent on the operation of the apparatus of the tightening planes, and a spacer could be used in combination

with a tightening planes to achieve the predictable results of preventing a predetermined gap between the tightening planes so as to prevent vibrations and other relative force related movement/distributions with respect to one another.

Re: Claim 2, Katagiri discloses the frictional member (15) is formed on a center of the shaft (14).

Re: Claims 4 and 5, Katagiri discloses a washer (71) inserted between contact planes of the fixing and pivotal plates and a frictional housing (19) formed around an outer periphery of the frictional member (15).

Re: Claim 6, Katagiri discloses a fixing portion of non-circular shape formed on both ends of the shaft (at 12a).

Re: Claim 8 and 9, Katagiri discloses a washer (71) of plastic material inserted on a contact plane between the fixing and pivotal planes, and the frictional member is made of engineering plastic.

[3] Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri in view of Peterson as applied to claim 1 above, and further in view of Lu, US-6,018,847.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for claim 7, Katagiri in view of Peterson teach of the above claims. Katagiri in view of Peterson do not disclose of a guiding protuberance or guiding portion as claimed. Lu teaches

a hinge comprising a fixing plate (50) and a pivot plate (40). A guiding protuberance (62) is formed on an outside vertical plane of the fixing plate, and a pivotal guiding portion in an arc shape (33) is formed on a vertical plane of the pivot plate. The protuberance is received in the guiding portion. This arrangement limits the range of motion of the hinge. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri and Peterson to include this arrangement to limit the range of motion of Katagiri's hinge.

[4] Claims 10-12, 14-17, and 19 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri, US-5,598,607, in view of Peterson, US-4,437,784, and in further view of Lu, US-6,018,847.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for independent claims 10 and 15, Katagiri discloses a pivotal plate (42), fixing plate (11), rotational shaft (14), frictional member (15), and tightening member (20) fitted into a hole (43, 44).

The difference between the claim and Katagiri is that Katagiri does not expressly disclose of a plate shaped spacer between the tightening planes so as to provide a predetermined gap between the tightening plates. Peterson teaches an arrangement comprising having parallel tightening planes (28, 30), a tightening member (22a) and a plate shaped spacer (12a) inserted between the tightening planes (28, 30) so as to provide a predetermined gap between the

tightening planes (28, 30). Peterson uses the spacer (12a) to help accurately control the distance between a support structure and a workpiece to be fastened to the support structure (see claim 1). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri as taught by Peterson, such that Katagiri includes a spacer plate, so as to help control the distance between the tightening members for force distributing purposes by providing a predetermined gap between said tightening plates. Further, it would have obvious to one having ordinary skill in the art to utilizes the spacer as taught by Peterson into the tightening planes as taught by Katagiri since the operation of the spacer is in no way dependent on the operation of the apparatus of the tightening planes, and a spacer could be used in combination with a tightening planes to achieve the predictable results of preventing a predetermined gap between the tightening planes so as to prevent vibrations and other relative force related movement/distributions with respect to one another.

Further, with regard to the latter issue above, Lu teaches a hinge comprising an elastic member (70), a fixing plate (50), and a pivot plate (40). A guiding protuberance (62) is formed on an outside vertical plane of the fixing plate, and a pivotal guiding portion in an arc shape (33) is formed on a vertical plane of the pivot plate. The protuberance is received in the guiding portion. This arrangement limits the range of motion of the hinge. The elastic member biases the arrangement to a preferred position (column 2, lines 35-45). The elastic member is mounted on a cylindrical spacer (20) that is mounted around a contact plane between the elastic member and the rotational shaft. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri include this arrangement to limit the range of motion of Katagiri's hinge and bias the hinge to a preferred position.

Re: Claims 11, 12, 16, and 17, Lu further shows the elastic member (70) to be a torsion spring in a coil shape, and that one end of the member is hooked on a horizontal plane (in 52) of the fixing plate (50) and the other extended to an inside from a horizontal plane (in 37) of the pivotal plate.

Re: Claims 14 and 19, Katagiri discloses the frictional member to be of engineering plastic.

Response to Arguments

[5] Applicant's amendment, see amendment and remarks filed 10/17/2007, with respect to the rejection(s) of claim(s) under Overhues et al., have been fully considered. However, upon further consideration of the amended claims and newly found art, a new ground(s) of rejection is made in view of Katagiri, US-5,598,607, in view of Peterson, US-4,437,784; and later in view of Lu. Consequently, all arguments are considered moot to said new grounds of rejection. Please also note the additional notice of reference cited.

Conclusion

[6] THIS ACTION IS NON-FINAL

[7] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

David Reese

/D. C. R./
Examiner, Art Unit 3677

/Flemming Saether/
Primary Examiner, Art Unit 3677